

U.S. Patent Application No. 10/694,659
Amendment dated August 11, 2005
Reply to Office Action of April 19, 2005

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Currently amended) A magnifying observation apparatus comprising:
 - a simple observation condition setting section for setting simple observation conditions for simply acquiring a plurality of observation images;
 - a simple observation image display section for displaying a plurality of simple observation images acquired per said plurality of simple observation conditions set with said simple observation condition setting section;
 - a selection section for selecting a desired simple observation image from ~~among~~ the plurality of simple observation images displayed on said simple observation image display section;
 - ~~an observation condition setting section for setting~~ enabling to set further observation conditions ~~as required~~ based on the simple observation conditions set to the simple observation image selected with said selection section; and
 - an observation image display section for displaying an observation image acquired based on the observation conditions set with said observation condition setting section.
2. (Currently amended) ~~A~~ The magnifying observation apparatus according to claim 1, further comprising:
 - a simple observation image acquisition section for acquiring simple observation images per said plurality of simple observation conditions set with said simple observation condition setting section;
 - a simple observation image storage section for storing a plurality of simple observation

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images acquired with said simple observation image acquisition section; and

an observation image acquisition section for acquiring an observation image based on the observation conditions set with said observation condition setting section,

wherein said simple observation image display section displays the plurality of simple observation images stored into said simple observation image display section, and said observation image display section displays the observation image acquired with said observation image acquisition section.

3. (Currently amended) ~~A~~ The magnifying observation apparatus according to claim 1, wherein said simple observation image display section lists a plurality of simple observation images.

4. (Currently amended) ~~A~~ The magnifying observation apparatus according to claim 1, wherein said simple observation image display section comprises a switching section for selectively displaying the plurality of simple observation images.

5. (Currently amended) ~~A~~ The magnifying observation apparatus according to claim 1, further comprising:

an adjustment section for performing at least positioning and focusing on an observation image displayed on said observation image display section before setting simple observation conditions by said simple observation condition setting section.

6. (Currently amended) ~~A~~ The magnifying observation apparatus according to claim 1, wherein the simple observation conditions set with said simple observation condition setting

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section includes at least one of the control of brightness of an image, adjustment of illumination method, adjustment of an angle of an imaging section, and image processing.

7. (Currently amended) ~~A~~ The magnifying observation apparatus according to claim ~~6~~ 1, wherein the simple observation conditions set with said simple observation condition setting section includes an adjustment of illumination method and wherein the adjustment of the illumination method is made by way of at least one of selection between incident-light illumination and transmitting illumination as an illumination direction, selection between peripheral illumination and side illumination, and selection among a diffuser, a polarizer and a transmitted light without using filters as a filter for an illumination light.

8. (Currently amended) ~~A~~ The magnifying observation apparatus according to claim ~~6~~ 1, wherein the simple observation conditions set with said simple observation condition setting section includes a control of brightness of an image, wherein the control of the brightness of an image is done by at least one of the control of the light quantity of the illumination, adjustment of the shutter speed of the imaging sections, gain control, and control of white balance.

9. (Currently amended) ~~A~~ The magnifying observation apparatus according to claim 1, wherein at least the characteristics of an observation subject is set with said simple observation condition setting section.

10. (Original) A method for operating a magnifying observation apparatus, said method comprising:

photographing an observation image with arbitrary observation conditions and displaying

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an arbitrary observation image photographed;

performing at least positioning and focusing on the arbitrary observation image displayed;

varying the observation conditions on the adjusted observation image and setting simple observation conditions for simply acquiring a plurality of observation images;

acquiring simple observation images per said plurality of simple observation conditions set;

displaying the plurality of simple observation images acquired;

selecting a desired simple observation image from among the plurality of simple observation images displayed;

setting further observation conditions as required based on the simple observation conditions set to the simple observation image selected;

acquiring an observation image based on the observation conditions set; and

displaying the acquired observation image.

11. (Original) A computer-readable medium storing instructions for operating a magnifying observation apparatus, said instructions comprising:

photographing an observation image with arbitrary observation conditions and displaying an arbitrary observation image photographed;

performing at least positioning and focusing on the arbitrary observation image displayed;

varying the observation conditions on the adjusted observation image and setting simple observation conditions for simply acquiring a plurality of observation images;

acquiring simple observation images per said plurality of simple observation conditions set;

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displaying the plurality of simple observation images acquired;
selecting a desired simple observation image from among the plurality of simple observation images displayed;
setting further observation conditions as required based on the simple observation conditions set to the simple observation image selected;
acquiring an observation image based on the observation conditions set; and
displaying an observation image acquired.

12. (New) The magnifying observation apparatus according to claim 1, further comprising photographing means for photographing an observation image from an observation subject.

13. (New) The magnifying observation apparatus according to claim 1, further comprising illumination means for illuminating the observation subject.

14. (New) The magnifying observation apparatus according to claim 13, further comprising illuminating direction switching means for switching the illuminating direction of said illumination means.

15. (New) The magnifying observation apparatus according to claim 13, wherein the simple observation conditions comprise illuminating conditions comprising a plurality of different angles of illumination of the observation subject.

16. (New) The magnifying observation apparatus according to claim 13, wherein the illumination means comprise illuminating parts, and wherein the simple observation conditions

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comprise the condition that all parts of the illumination parts are illuminated and/or the condition that one part of the illuminating parts is illuminated.

17. (New) The magnifying observation apparatus according to claim 13, wherein the illumination means comprise illuminating parts, and wherein the illumination means and the illuminating direction switching means comprise the condition that all parts of the illumination parts are illuminated and/or the condition that one part of the illuminating parts is illuminated.

18. (New) The magnifying observation apparatus according to claim 13, wherein the illumination means comprise a ring-shaped illuminating part.

19. (New) The magnifying observation apparatus according to claim 12, further comprising photographing adjustment means for photographing the observation subject under illumination conditions from respectively different angles by controlling the illuminating direction switching means of said illumination means per the illuminating conditions set to said simple observation condition setting means.

20. (New) The magnifying observation apparatus according to claim 1, wherein the simple observation image display section for displaying a plurality of simple observation images is a simple observation image display section for displaying simultaneously on the same display screen of the simple observation image display section a plurality of simple observation images and wherein the plurality of simple observation images is photographed by the photographing means.

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21. (New) The magnifying observation apparatus according to claim 1, wherein the simple observation conditions of the simple observation condition setting means are set automatically.
22. (New) The magnifying observation apparatus according to claim 1, wherein the simple observation conditions of the simple observation condition setting means are set arbitrarily.
23. (New) The magnifying observation apparatus according to claim 13, wherein the simple observation conditions comprise the condition of an incident light illumination and the condition of a transmitting illumination.
24. (New) The magnifying observation apparatus according to claim 13, wherein the simple observation conditions comprise the condition of a filter being present or absent, and wherein the filter is preferably a polarizer or a diffuser.
25. (New) The magnifying observation apparatus according to claim 1, wherein the observation image display section is identical with the simple observation image display section.
26. (New) The magnifying observation apparatus according to claim 1, wherein a menu for setting the simple observation condition is displayed on the display screen.
27. (New) The method according to claim 10, wherein varying the observation conditions comprises varying the illumination conditions of the observation subject.

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28. (New) The method according to claim 27, wherein the illumination conditions comprise a plurality of different angles of illumination of the observation subject and/or the condition that all parts of the illumination parts are illuminated and/or the condition that one part of the illuminating parts is illuminated and/or the condition of an incident light illumination and/or the condition of a transmitting illumination and/or the condition of a filter being present or absent, wherein the filter is preferably a polarizer or a diffuser.

29. (New) The method according to claim 10, further comprising switching the illuminating direction of illumination means.

30. (New) The magnifying observation apparatus according to claim 1, further comprising display means for displaying an observation image based on a signal acquired by said photographing means.